## Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of	)	
	)	
Office of Engineering and Technology	)	ET Docket 13-101
Invites Comments on Technological	)	
Advisory Council (TAC) White Paper and	)	
Recommendations for Improving	)	
Receiver Performance	)	

## REPLY COMMENTS OF IBIQUITY DIGITAL CORPORATION

iBiquity Digital Corporation ("iBiquity") hereby submits these reply comments in the above-referenced proceeding. The Office of Engineering and Technology has requested comment on the Technological Advisory Council White Paper¹ concerning improvements to receiver performance and the interference tolerance of wireless systems.² In these reply comments, iBiquity provides its support for several of the commenters that have recognized the value of the recommendations in the TAC White Paper and the potential benefit of the proposed interference limits policy.

iBiquity is the inventor of the HD Radio<sup>™</sup> system, which the Commission has selected as the digital upgrade for AM and FM broadcasting.<sup>3</sup> Since the FCC's original authorization of digital AM and FM service, more than 2,300 stations have upgraded to digital broadcasts. More

<sup>&</sup>lt;sup>1</sup> Interference Limits Policy-The use of harm claim thresholds to improve the interference tolerance of wireless systems ("TAC White Paper").

See Office of Engineering and Technology Invites Comments on Technological Advisory Council (TAC) White Paper and Recommendations for Improving Receiver Performance, Public Notice, ET Docket No. 13-101 (April 22, 2013)("Public Notice").

See Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service, Second Report and Order, First Order on Reconsideration and Second Further Notice of Proposed Rule Making, 22 FCC Rcd 10344 (2007) ("Second Report and Order").

than 14 million radio receivers have been produced and introduced into the market. Today, most automobile brands offer HD Radio receivers in their vehicles to a growing number of consumers who enjoy the enhanced sound quality, new audio channels and advanced data services that the HD Radio system supports. In addition to the robust rollout of the technology underway in the United States, Mexico recently selected the HD Radio system as the digital radio upgrade for Mexico. Currently, 36 stations are on the air in Mexico (including 12 in Mexico City), and HD Radio receivers are available as original equipment in cars sold in the Mexican market and as consumer electronics radios sold at retail.

As a technology developer that introduced a new digital radio system into a heavily used frequency band with hundreds of millions of existing receivers in use by consumers, iBiquity has a great understanding of the challenges presented by the need for new technology to accommodate existing systems and existing users. iBiquity agrees with the comments of parties such as the Consumer Electronics Association that endorsed the TAC White Paper proposal to establish harm claim thresholds.<sup>4</sup> iBiquity believes this proposal offers an appropriate balance between the need to offer the potential for new innovation and the need to provide existing users predictability about their continued ability to avoid interference. At the same time, iBiquity agrees the use of thresholds provides a benchmark for performance that encourages receiver manufacturers to strive for improved performance in their products.

iBiquity's experience with the development of radio receivers provided significant insights into the problem of 'de-coupled' receivers that the National Association of Broadcasters correctly highlights.<sup>5</sup> iBiquity agrees that in this situation voluntary receiver performance

<sup>4</sup> Comments of the Consumer Electronics Association dated July 22, 2013 at 6.

<sup>&</sup>lt;sup>5</sup> Comments of The National Association of Broadcasters dated July 22, 2013 at 2.

specifications can help ensure that receiver products conform to the transmission system. This is particularly important in the context of services that involve millions of units widely sold to consumers as is the case for broadcasting services.

iBiquity does not agree with the comments of Digital Radio Mondiale ("DRM") or its call for a universal digital radio receiver. 6 Contrary to the claims in its comments, DRM is not a global system. Although it has a system proposal for digital radio, its technology is not in commercial operation in any part of the world. Unlike the HD Radio system, which is used by thousands of broadcast stations and is incorporated in millions of receiver products used every day by consumers, the DRM system has been used in a limited number of field trials in a limited number of cities. DRM's call for the FCC to "encourage" the use of multi-standard digital radio receivers is irrelevant to and outside the scope of this proceeding.<sup>7</sup> Moreover, DRM's "utopian' aspiration of establishing one single digital audio broadcasting standard" is contrary to the way the marketplace works. iBiquity acknowledges that multi-standard receivers can be useful for products that are distributed worldwide, and the receiver market can voluntarily address that need. However, the inclusion of multiple system standards in a single device can impose significant additional and unnecessary costs on consumers for technology they have no interest in or no ability to use. DRM's call for a universal receiver would help DRM to leverage the commercial success of viable digital radio systems such as the HD Radio system and jumpstart the sale of DRM compatible receivers. But that is not a goal that iBiquity shares or that would

<sup>&</sup>lt;sup>6</sup> Comments of Digital Radio Mondiale dated June 20, 2013.

<sup>&</sup>lt;sup>7</sup> *Id*. at 4.

<sup>8</sup> Id.

further the interest of broadcasters or consumers. The Commission should ignore the DRM proposal.

iBiquity supports the Commission's efforts to enhance receiver performance and to create flexibility to encourage the introduction of new technology. The TAC White Paper and the comments in this proceed are encouraging because they focus on finding the correct balance between regulatory intervention and allowing the marketplace to function. iBiquity encourages the Commission to work with the industry groups that have participated in this proceeding to advance this discussion.

Respectfully submitted,

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August 7, 2013